

Everyday Math II

Answer Keys

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Determining Mean, Median and Mode (Key)

Directions: Find the mean, median and mode (when appropriate) for each set of data.

Set A

14, 18, 12, 18, 14, 25
32, 18, 16

Mean **18.55**

Median **18**

Mode **18**

Set B

10,000
10,000
10,000
10,000
12,000
58,000

Mean **18,333**

Median **10,000**

Mode **10,000**

Set C

4 Hot Dogs
3 Steaks
13 Pizzas

Mean **6.66**

Median **4**

Mode **no mode**

Set D

The most trouble-free 1991 car models sold in the USA

<i>Model/Base Price</i>		<i>Problems/100 Cars</i>
1. Lexus LS400	\$39,000	47
2. Acura NSX	\$61,000	71
3. BMW 750iL	\$74,600	74
4. Lexus ES250	\$21,500	76
5. Mercedes-Benz S	\$63,600	77
6. Infiniti Q45	\$40,000	78
7. Pontiac 6000	\$12,999	78
8. Toyota Camry	\$12,198	79
9. Toyota Cressida	\$22,698	80
10. Honda CRX	\$ 9,325	89
11. Mercedes-Benz 190E	\$28,050	89

Mean **76.18**

Median **78**

Mode **78, 89**

Everyday Math II

Probability (Key)

Probability is the chance of an event happening. If you toss a coin, there are two possibilities. The coin may land showing its head or it may land showing its tail. The probability of an event is written as a fraction.

1. The Greenport Telephone book contains 75000 names. Fifteen Smiths are listed in the phone book. In a random selection from Greenport telephone numbers, what is the probability that the first number selected will belong to a Smith?
 $\frac{1}{500}$
2. Liz works as a cashier in a grocery store. At the end of the day she had 12 quarters, 20 dimes, 18 nickels, and 30 pennies. She put all the coins in a bag.
 - a. What is the probability that the first coin she takes from the bag will be a dime?
 $\frac{1}{4}$
 - b. What is the probability that the first coin she takes from the bag will be a penny?
 $\frac{3}{8}$
 - c. What is the probability that the first coin she takes from the bag will be either a quarter or a nickel?
 $\frac{3}{8}$
3. Carlos received a shipment of sweaters to sell in his store. The shipment contained 10 small size sweaters, 15 medium sweaters, and 8 large sweaters. What is the probability that the first sweater he takes from the box will be a medium size?
 $\frac{5}{11}$
4. A carton contains 8 cans of tomato sauce and 6 cans of green beans.
 - a. What is the probability that the first can taken from the carton will be a can of tomato sauce?
 $\frac{4}{7}$
 - b. If the first can taken out is tomato and the second is green beans, what is the probability that the next can taken from the box will be green beans?
 $\frac{5}{12}$
5. Jose Acevedo, his wife Beatrice, and their son Felipe each bought a ticket for a chance to win a color TV. Altogether 540 tickets were sold.

- a. What is the probability that Jose will win the television? **$\frac{1}{540}$**
- b. What is the probability that one of the Acevedos will win the TV set?
 $\frac{1}{180}$

Everyday Math II

Home Improvement (Key)

Tiling a Room: Use the diagram at the bottom of this page to help you answer the following questions.

1. Lila Andrews wants to tile the living room shown at the right. she chooses self-stick vinyl tile that costs \$.80 for each 12" by 12" (1 sq. ft.) tile.

- a) How many tiles does Lila need for the living room?

208 tiles

- b) What is the total cost of this tile?

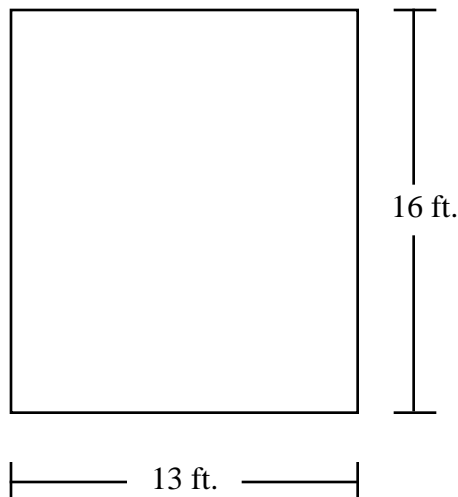
\$166.40

- c) Lila also considers buying tile at a "close-out" sale for \$.50 per 12" by 12" tile. However, she would have to buy 350 tiles at this price. what would be the cost of these 350 "close-out" tiles?

\$175.00

- d) How many "close-out" tiles would Lila have left over after tiling the living room?

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Everyday Math II

Converting Among Standard Measurements (Key)

Volume

1 gallon (gal) = 4 quarts (qt)
1 quart = 2 pints (pt)
1 pint = 2 cups (c)

Time

1 week = 7 days
1 day = 24 hours (hr)
1 hour = 60 minutes (min)
1 minute = 60 seconds (sec)

Length

1 mile (mi) = 1,760 yards (yd) or
5,280 feet (ft)
1 yard = 3 feet
1 foot = 12 inches (in)

Weight

1 ton (t) = 2,000 pounds (lb)
1 pound = 16 ounces (oz)

Convert the following measurements.

1. How many quarts are in 7 gallons?

28 quarts

2. How many inches are in 4 yards?

144 inches

3. How many days are in 72 hours?

3 days

4. How many pints are in 6 pints?

12 pints

5. How many yards are in 20 miles?

35,200 yards

6. How many inches are in 10 feet?

120 inches

7. How many ounces are in 3 pounds?

48 ounces

8. How many minutes are in a day?

1,440 minutes

9. How many pounds are in 16 tons?

32,000 pounds

10. How many quarts are in
40 gallons?

160 quarts